Figure 6 is a circuit diagram showing three-level signal receiving and quality checking provisions;

Figure 6A is a circuit diagram of a receive circuit which is alternative to that of Figure 6;

Figure 7 is a circuit diagram for node provision using a broadband transmission line transformer;

Figure 7A is a circuit diagram showing an alternative transmission-line transducer;

Figure 8 is a diagram showing transformers using coaxial or twisted pair cable;

Figure 9 is a diagram showing a microstrip transmission line transformer as a printed circuit board using planar magnetic cores to magnetically link circuits;

Figure 10 is a circuit diagram of a monolithic integrated system using P-channel or N-channel switches to connect or isolate ports;

Figure 1)1 is a circuit diagram for reflection signal generation using bipolar transistors:

Figure 12 is a circuit diagram for reflection signal generation using GaAs components;

Figure/13 is a diagram showing a routing network;

Figure 14 is a circuit diagram showing a node modified for accessing and communication from either side of its transmission line connections;

Figure 15 is a circuit diagram of a router;

Figure 15A and 15B are circuit diagrams for router reflection/switching features;

Figure 16 is a diagram of a device according to an embodiment of the invention incorporating time domain reflectometry;